

# Claims

- [c1] 1.A method for determining the compatibility of a working surface with an optical mouse, the optical mouse comprising an optical sensor, the method comprising:
- (a) utilizing the optical sensor to sense the optical characteristics of the working surface;
  - (b) utilizing a judging circuit to judge the compatibility of the working surface with the optical mouse according to the optical characteristics sensed by the optical sensor;
  - (c) utilizing the judging circuit to generate a judging signal according to the result obtained in step (b).
- [c2] 2.The method of claim 1 further comprises displaying the result of judge obtained in step (b) on a display device according to the judging signal.
- [c3] 3.The method of claim 2 wherein the display device comprises at least one light- emitting device (LED).
- [c4] 4.The method of claim 2 wherein the display device is a liquid crystal display (LCD) device installed on the optical mouse.

- [c5] 5.The method of claim 2 wherein the display device is a monitor of a computer system.
- [c6] 6.The method of claim 1 wherein the judging circuit is a control circuit of the optical mouse.
- [c7] 7.The method of claim 1 further comprises utilizing the optical sensor to generate a sensing value according to the optical characteristics of the working surface sensed by the optical sensor.
- [c8] 8.The method of claim 7 wherein the judging circuit is a central processing unit (CPU) of a computer system, and step (b) further comprises utilizing the judging circuit to operate the sensing value, in order to judge the compatibility of the working surface with the optical mouse.
- [c9] 9.An optical mouse used for determining the compatibility of a working surface comprising:  
an optical sensor for sensing the optical characteristics of the working surface to generate a sensing value;  
a judging circuit electrically connected to the optical sensor for generating a judging signal according to the sensing value; and  
a display device electrically connected to the judging circuit for displaying the compatibility of the working surface with the optical mouse according to the judging

signal.

- [c10] 10.The optical mouse of claim 9 wherein the judging circuit is a control circuit of the optical mouse.
- [c11] 11.The optical mouse of claim 9 wherein the display device comprises at least one LED installed on the optical mouse.
- [c12] 12.The optical mouse of claim 9 wherein the display device is an LCD device installed on the optical mouse.